

What is claimed is:

1. An antisense compound 8 to 30 nucleobases in length targeted to a nucleic acid molecule encoding PI3K p85, wherein said antisense compound specifically hybridizes with and inhibits the expression of PI3K p85.

2. The antisense compound of claim 1 which is an antisense oligonucleotide.

3. The antisense compound of claim 2 wherein the antisense oligonucleotide has a sequence comprising SEQ ID NO: 21, 22, 27, 28, 30, 33, 40, 41, 8, 9, 12, 13, 14, 15, 17, 18, 20, 23, 24, 32, 37, 42, 43, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 66, 67 or 72.

4. The antisense compound of claim 2 wherein the antisense oligonucleotide has a sequence comprising SEQ ID NO: 21, 27, 30 or 41.

5. The antisense compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified internucleoside linkage.

6. The antisense compound of claim 5 wherein the modified internucleoside linkage is a phosphorothioate linkage.

7. The antisense compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified sugar moiety.

8. The antisense compound of claim 7 wherein the modified sugar moiety is a 2'-O-methoxyethyl sugar moiety.

9. The antisense compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified nucleobase.

10. The antisense compound of claim 9 wherein the modified nucleobase is a 5-methylcytosine.

11. The antisense compound of claim 1 wherein the antisense oligonucleotide is a chimeric oligonucleotide.

12. A pharmaceutical composition comprising the antisense compound of claim 1 and a pharmaceutically acceptable carrier or diluent.

13. The pharmaceutical composition of claim 12 further comprising a colloidal dispersion system.

14. The pharmaceutical composition of claim 12 wherein the antisense compound is an antisense oligonucleotide.

15. A method of inhibiting the expression of PI3K p85 in human cells or tissues comprising contacting said cells or tissues with the antisense compound of claim 1 so that expression of PI3K p85 is inhibited.

16. A method of treating a human having a disease or condition associated with PI3K p85 comprising administering to said human a therapeutically or prophylactically effective amount of the antisense compound of claim 1 so that expression of PI3K p85 is inhibited.

17. The method of claim 16 wherein the disease or condition is a hyperproliferative disorder.

18. The method of claim 17 wherein the hyperproliferative disorder is cancer.

19. The method of claim 16 wherein the disease or condition is a metabolic disease or condition.

20. The method of claim 16 wherein the disease or condition is diabetes.

21. The method of claim 16 wherein the disease or condition is Type 2 diabetes.

22. The method of claim 16 wherein the disease or condition is obesity.

23. The antisense compound of claim 1 which is targeted to a nucleic acid molecule encoding a truncated form of human PI3K p85.

24. A method of decreasing blood glucose levels in an animal comprising administering to said animal the antisense compound of claim 1.

25. The method of claim 24 wherein the animal is a human or a rodent.

26. The method of claim 24 wherein the blood glucose levels are plasma glucose levels or serum glucose levels.

27. The method of claim 24 wherein the animal is a diabetic animal.

28. A method of decreasing insulin levels in an animal comprising administering to said animal the antisense compound of claim 1.

29. The method of claim 28 wherein the animal is a human or a rodent.

30. The method of claim 28 wherein the insulin levels are plasma insulin levels or serum insulin levels.

31. The method of claim 28 wherein the animal is a diabetic animal.

32. A method of preventing or delaying the onset of a disease or condition associated with PI3K P85 in an animal comprising administering to said animal a therapeutically or prophylactically effective amount of the antisense compound of claim 1.

33. The method of claim 32 wherein the animal is a human.

34. The method of claim 32 wherein the disease or condition is a metabolic disease or condition.

35. The method of claim 32 wherein the disease or condition is diabetes.

36. The method of claim 32 wherein the disease or condition is Type 2 diabetes.

37. The method of claim 32 wherein the disease or condition is obesity.

38. The method of claim 32 wherein the disease or condition is a hyperproliferative condition.

39. The method of claim 38 wherein the hyperproliferative condition is cancer.

40. A method of preventing or delaying the onset of an increase in blood glucose levels in an animal comprising administering to said animal the antisense compound of claim 1.

41. The method of claim 40 wherein the animal is a human or a rodent.

42. The method of claim 40 wherein the blood glucose levels are plasma glucose levels or serum glucose levels.

43. The method of claim 40 wherein the animal is a diabetic animal.

44. A method of preventing or delaying the onset of an increase in insulin levels in an animal comprising administering to said animal the antisense compound of claim 1.

45. The method of claim 44 wherein the animal is a human or a rodent.

46. The method of claim 44 wherein the insulin levels are plasma insulin levels or serum insulin levels.

47. The method of claim 44 wherein the animal is a diabetic animal.

48. The antisense compound of claim 1 which is targeted to PI3K p85a and which preferentially inhibits the expression of PI3K p85a.

49. The antisense compound of claim 1 which is targeted to a region of a nucleic acid molecule encoding PI3K p85a which is not found in a nucleic acid molecule encoding PI3K p50a.

50. The antisense compound of claim 1 which is targeted to a region of a nucleic acid molecule encoding PI3K p85a which is not found in a nucleic acid molecule encoding PI3K p55a.

51. The antisense compound of claim 1 which inhibits the expression of all splice variants encoded by the PI3K p85a gene.

52. The antisense compound of claim 1 which alters the ratio of PI3K p85a to PI3K p50a expressed by a cell or tissue.

53. The antisense compound of claim 48 which increases the ratio of PI3K p85a to PI3K p50a expressed by a cell or tissue.

54. The antisense compound of claim 48 which decreases the ratio of PI3K p85a to PI3K p50a expressed by a cell or tissue.

55. The antisense compound of claim 1 which alters the ratio of PI3K p85a to PI3K p55a expressed by a cell or tissue.

56. The antisense compound of claim 51 which increases the ratio of PI3K p85a to PI3K p55a expressed by a cell or tissue.

57. The antisense compound of claim 51 which decreases the ratio of PI3K p85a to PI3K p55a expressed by a cell or tissue.

58. A method of modulating PI3K signal transduction in cells or tissues comprising contacting said cells or tissues with the antisense compound of claim 1 so that PI3K signal transduction is modulated.

59. A method of altering the ratio of PI3K p85a to PI3K 50a in human cells or tissues comprising contacting said cells or tissues with the antisense compound of claim 48 so that the ratio of PI3K p85a to PI3K p50a is altered.

60. A method of altering the ratio of PI3K p85a to PI3K 55a in human cells or tissues comprising contacting said cells or tissues with the antisense compound of claim 51 so that the ratio of PI3K p85a to PI3K p55a is altered.

61. A method of treating a human having a disease or condition associated with PI3K signal transduction comprising administering to said human a therapeutically or prophylactically effective amount of the antisense compound of claim 1 so that PI3K signal transduction is modulated.

62. A method of treating a human having a disease or condition associated with PI3K p85 expression comprising administering to said human a therapeutically or prophylactically effective amount of the antisense compound of claim 48 so that the ratio of PI3K p85a to PI3K p51a is altered.

63. A method of treating a human having a disease or condition associated with PI3K p85 expression comprising administering to said human a therapeutically or prophylactically effective amount of the antisense compound

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of claim 51 so that the ratio of PI3K p85a to PI3K p55a is altered.